

the export carrier activity of said microbial organism specific for a particular amino acid with an amino acid sequence as given in SEQ ID No.2 in accordance with the export carrier activity endogenous to said microbial organism,

and the export gene expression of said microbial organism specific for a particular amino acid with a nucleotide sequence of nucleotide 1016 to 1726 according to SEQ ID No. 1 in accordance with the export gene expression endogenous to said microbial organism by means of one of the steps selected from the group of:

- G5  
conclude
- i) mutating the export carrier gene, such that an export carrier with increased export activity is generated,
  - ii) increasing the number of gene copies of the export carrier gene,
  - iii) modifying regulatory signals assigned to the export gene, and
  - iv) amplifying regulatory signals assigned to the export gene,

such that amino acids are produced by said microbial organism with increased efficiency.

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G6

4. A process according to claim 1, wherein the export gene expression of the export carrier is increased by increasing the number of gene copies, whereby the export carrier gene is expressed from the additional gene copies.

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G7

7. A process according to claim 5, wherein the export gene is installed in a gene construct, which includes regulatory gene sequences operably linked to the export gene.

8. A process according to claim 7, wherein the regulatory gene sequence includes a nucleotide sequence coding for the

*G7*  
*Excluded*  
amino acid sequence as given in SEQ ID No. 3 from nucleotide  
1421-2293.

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Delete claim 9

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*G8*  
10. A process according to claim 5, wherein a microorganism producing the respective amino acid is transformed with the gene construct including the export gene.

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*G9*  
12. A process according to claim 10, wherein, for the transformation, a microorganism is utilized in which the enzymes which participate in the synthesis of the corresponding amino acids are deregulated.

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*G10*  
13. A process according to claim 10, wherein, for the transformation, a microorganism is utilized which contains an increased amount of the metabolites of the central metabolism.

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*G11*  
14. A process according to claim 4, wherein the export gene is isolated from a microorganism strain of the type Corynebacterium.

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15. A process according to claim 3, wherein the export gene sequence is identified by comparison with the sequence of an already known export gene.

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16. A process according to claim 15, wherein the amino acid sequence derived from the export gene sequence to be identified is compared with the amino acid sequence given in SEQ ID No. 2.

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17. A process according to claim 1, wherein the export gene expression is increased by amplifying the transcription signals.

G11  
Conclude  
18. A process according to claim 1, wherein as export gene, a gene with a nucleotide sequence coding for the amino acid sequence given in SEQ ID No. 2 is utilized.

19. A process according to claim 18, wherein as export gene, one of the genes with the nucleotide sequence of nucleotide 1016 to 1726 according to SEQ ID No. 1 is utilized.

20. A process according to claim 1 for the manufacture of L-lysine.

G12  
43. The use of an export gene for increasing the amino acid production of microorganisms by:

- i) constructing a gene construct including an export carrier gene,
- ii) inserting said construct into a suitable vector,
- iii) transforming a suitable host cell with said vector,
- iv) cultivating said transformed host cell in a culture medium,
- v) recovering the amino acid from the culture, and
- vi) determining the desired amino acid amount.

Cancel claim 44.

Cancel claim 45.

G13  
46. The use according to claim 43, wherein the gene construct additionally carries regulatory gene sequences.